

PATENT
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IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Canceled)

2. (Currently Amended) A magnetic head which is mounted on a rotary drum capable of allowing a tape magnetic recording medium to run thereon and moves with the rotation of said rotary drum, so as to perform recording on said tape magnetic recording medium or reproducing from said tape magnetic recording medium, said magnetic head comprising:

a surface for facing said tape magnetic recording medium and for performing hydrodynamic interference with said tape magnetic recording medium while moving by said rotation; and

a recording/reproducing portion for producing magnetic interference with said tape magnetic recording medium in a non-contact state,

wherein said surface is a smooth flat surface placed within a cylindrical drum surface,

wherein a head gap is placed in a range where a magnetic tape is close to a minimum distance capable of producing mutual magnetic recording and reproducing, and, said tape magnetic recording medium is brought toward said surface due to a pressure

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~~difference between a drum side and an outside surface side of said tape magnetic recording medium; and~~

said recording/reproducing portion is placed outside an area where said tape magnetic recording medium contacts said surface by the hydrodynamic interference and is provided so as to be able to perform at least either recording or reproducing by the magnetic interference with said tape magnetic recording medium in a non-contact state.

3. (Canceled)

4. (Currently Amended) A recording and reproducing method for a tape magnetic recording medium,

wherein a smooth flat surface or a smooth curved surface having a curvature gentler than a curvature of a rotary drum is placed within a cylindrical drum surface, and a head gap is placed in a range where a magnetic tape is close to a minimum distance capable of producing mutual magnetic recording and reproducing provided on the surface of said rotary drum having a cylindrical surface,

a recording/reproducing portion for producing magnetic interference with a tape magnetic recording medium is placed on said smooth flat surface or on said smooth curved surface, and said tape magnetic recording medium is made close to said rotary drum rotating to occur pressure reduction by the hydrodynamic interference between said smooth flat surface or said smooth curved surface and said tape magnetic recording medium,

whereby said pressure reduction allows said tape magnetic recording medium to approach said recording/reproducing portion to a distance close to the minimum distance

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capable of producing mutual magnetic interference to perform at least either recording or reproducing.

5 – 9. (Canceled)

10. (Previously Presented) The magnetic head according to claim 2, wherein said surface facing to said tape magnetic recording medium is a smooth curved surface having a curvature gentler than the curvature of said rotary drum.

11 – 13. (Canceled)